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| 10/038,409 | 01/03/2002 | Michael Allen Yudkowsky | 42390p13063 | 7057 |

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| EXAMINER | |
|---|---|
| ARMSTRONG, ANGELA A | |
| **ART UNIT** | **PAPER NUMBER** |
| 2654 | |

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/038,409 | YUDKOWSKY, MICHAEL ALLEN | |
| | Examiner | Art Unit | |
| | Angela A. Armstrong | 2654 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *3/01/2004 and 6/21/2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

As per applicant's request a new Office Action addressing applicant's arguments filed March 1, 2004, is provided.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-12 and 14-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Goronzy et al (EP 1022725 A1).

   Goronzy discloses a system for the selection of acoustic models using speaker verification.

2. Regarding claim 1, Goronzy discloses determining an identity of a speaker through a network over which output data, including identification information, is provided to one or more speech-recognition systems, at col. 3, lines 1-9 and 35-46, since the networked system (col. 3, lines 2-3) checks the identity of the speaker every time the speaker changes, which requires use of some form of identification information to output to the verification module (4). Additionally, Goronzy discloses attempting to locate, based on the identity of the speaker, a voice model for speaker, at col. 3, lines 53-58; and retrieving from a storage area

the voice model for the speaker if the voice model for the speaker is located, at col. 3, line 53 continuing to col. 4, line 2.

Regarding claim 2, Goronzy discloses the voice model comprises a speaker dependent voice model at col. 3, line 53 continuing to col. 4, line 2.

Regarding claim 3, Goronzy discloses wherein determining the identity of the speaker over the network comprises using identification information received from the speaker over the network to determine the identity of the speaker, at col. 3, line 1 continuing to col. 4, line 2.

Regarding claim 4, Goronzy discloses receiving from a device in the network identifying data regarding the speaker, at col. 3, line 39 continuing to col. 4, line 2; determining the identity of the speaker based on the identifying data regarding the speaker, at col. 3, line 39 continuing to col. 4, line 2.

Regarding claim 5, Goronzy discloses wherein the storage area comprises an internal storage area containing speaker-dependent voice models for multiple persons, at col. 3, line 58 continuing to col. 4, line 2.

Regarding claim 6, Goronzy discloses wherein the storage area comprises an external storage area accessible over the network, at col. 3, line 58 continuing to col. 4, line 2.

Regarding claim 7, Goronzy discloses wherein the output data comprise phonemes, at col. 3, line 39.

Regarding claim 8, Goronzy discloses receiving an utterance from the speaker at col. 3, lines 39-43; using the voice model to extract phonemes from the utterance at col. 3, lines 39-52; and transmitting the phonemes over the network to the speech-recognition system, at col. 3, lines 39-43.

Regarding claim 9, Goronzy discloses wherein the utterance comprises one or both of the vocalized words and vocalized sounds, at col. 3, lines 39-43.

Regarding claim 10, Goronzy discloses receiving from the speech recognition system contents of a recognized utterance of the speaker, at col. 3, lines 43-58; revising the voice model for the speaker based on the contents of the recognized utterance, at col. 3, lines 53-58; col. 4, lines 30-40.

Regarding claim 11, Goronzy discloses wherein the output data comprise a voice model for the speaker, at col. 3, lines 53-58; col. 4, lines 30-40.

Regarding claim 12, Goronzy discloses further comprising transmitting the voice model over the network to the speech-recognition system, at col. 3, lines 53-58.

Regarding claim 14, Goronzy discloses retrieving a speaker-independent voice model if failing to locate the voice model for the speaker, at col. 4, lines 30-40; receiving an utterance from the speaker, at col. 4, lines 19-21; using the speaker-independent voice model to extract phonemes from the utterance, at col. 3, lines 53-58; transmitting the phonemes over the network to a speech-recognition system, at col. 3, lines 43-52; receiving from the speech-recognition system contents of a recognized utterance of the speaker, at col. 3, lines 46-58 and col. 4, lines 17-40; and generating a voice model for the speaker based on the contents of the recognized utterance, at col. 4, lines 17-40.

Regarding claims 15-30 claims 15-30 are similar in scope and content to claims 1-12 and 14 and are therefore rejected under similar rationale.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Göronzy in view of Ellis et al, "Tandem Acoustic Modeling in Large Vocabulary Recognition", (ICASSP '01). 2001 IEEE International Conference on Acoustics, Speech, and Signal Processing, 2001 Proceedings, vol. 1, pages 517-520.

4. Regarding claim 13, Goronzy does not specifically teach implementation of Aurora feature extraction. However, implementation of Aurora features was well known in the art.

In a similar field of endeavor, Ellis teaches a system of tandem acoustic modeling in a large vocabulary recognition system, and specifically describes the advantages of using Aurora data in a recognition system since the system involves recognizing data in a wide range of noisy backgrounds.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Goronzy to implement Aurora feature processing, for the purpose of providing a recognition system that is able to recognize data in noisy backgrounds, as taught by Ellis.

***Response to Arguments***

5. Applicant's arguments filed March 1, 2004 have been fully considered but they are not persuasive.

Regarding claims 1, 18, and 28, applicant argues claims 1, 18, and 28, as amended, require a method, article of manufacture, and apparatus including, inter alia, "determining an identity of a speaker through a network over which output data including identification information is provided to one or more speech-recognition system" and argues Goronzy fails to disclose at least the above quoted element of independent claims 1, 18, and 28. The Examiner disagrees and argues Goronzy discloses determining an identity of a speaker through a network over which output data, including identification information, is provided to one or more speech-recognition systems, at col. 3, lines 1-9 and 35-46, since the networked system (col. 3, lines 2-3) checks the identity of the speaker every time the speaker changes, which requires use of some form of identification information to output to the verification module (4).

Regarding claims 2-12, 14, and 18-30, the examiner contends Goronzy teaches the limitations of claims 1, 18, and 28, as indicated in the rejection and arguments above. Additionally, Goronzy teaches the limitations/elements of dependent claims 2-12, 14, and 18-30, as indicated in the rejection above.

Regarding claim 15, Applicant argues claim 15 requires a method including, inter alia, "accessing by a speaker a network containing a speech recognition system" and argues Goronzy fails to disclose the quoted element of independent claim 15. The Examiner disagrees and argues Goronzy discloses determining an identity of a speaker through a network over which output data, including identification information, is provided to one or more speech-recognition

systems, at col. 3, lines 1-9 and 35-46, since the networked system (col. 3, lines 2-3) checks the identity of the speaker every time the speaker changes, which requires use of some form of identification information to output to the verification module (4).

Regarding claims 16 and 17, the examiner contends Goronzy teaches the limitations of independent claim 15 as indicated in the rejection and arguments above. Additionally, Goronzy teaches the limitations/elements of dependent 16 and 17, as indicated in the rejection above.

Regarding claim 13, applicant argues Ellis fails to teach or suggest the "determining an identity of a speaker through a network over which output data including identification information is provided to one or more speech-recognition system" limitation of claim 1. The examiner argues Goronzy teaches the claim limitation, as indicated in the rejection and arguments regarding independent claim 1 above.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A. Armstrong
Examiner
Art Unit 2654

AAA
August 23, 2004